IN THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 (Currently amended). An injectable radiosensitizer pharmaceutical composition consisting ~~of a sodium or potassium salt~~ of a halogenated xanthene in a pharmaceutical delivery vehicle, wherein said pharmaceutical composition is for treatment, using applied ionizing radiation having an energy of greater than approximately 1 keV, of cancerous, pre-cancerous, and infectious diseases of human and animal tissue,

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein, ~~and provided that~~

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said composition does not contain liposomes.

2. (Previously presented) The pharmaceutical composition of claim 1 wherein said halogenated xanthene is present in a concentration of greater than about 0.001% to less than about 20%.

3 (Currently amended). An injectable radiosensitizer pharmaceutical composition consisting of a halogenated xanthene in a pharmaceutical delivery vehicle, wherein said pharmaceutical

composition is for treatment, using applied ionizing radiation having an energy of greater than approximately 1 keV, of cancerous, pre-cancerous, and infectious diseases of human and animal tissue. ~~The pharmaceutical composition of claim 1~~

wherein said halogenated xanthene ~~is~~ consists of disodium Rose Bengal, disodium Diiodofluorescein, disodium Eosin B, disodium Eosin Y, disodium Erythrosin B, or disodium Phloxine B,

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said composition does not contain liposomes.

4-10 (Canceled)

11 (Previously presented). The pharmaceutical composition of claim 1 wherein said pharmaceutical composition is for the treatment of diseases of the skin, diseases of the mouth and digestive tract, diseases of the urinary and reproductive tracts, diseases of the respiratory tract, diseases of the circulatory system, diseases of the head and neck, diseases of the endocrine and lymphoreticular systems, diseases of connective tissues, and diseases of tissue surfaces exposed during surgery.

12. (Previously presented) The pharmaceutical composition of claim 1 wherein said applied ionizing radiation is applied x-ray irradiation.

13. (Previously presented) The pharmaceutical composition of claim 1 wherein said applied ionizing radiation is applied gamma irradiation.

14 (Previously presented). The pharmaceutical composition of claim 1 wherein said applied ionizing radiation has an energy of less than approximately 1000 MeV.

15. (Canceled)

16 (Currently amended). Use ~~of a sodium or potassium salt~~ of a halogenated xanthene, as the active component in a pharmaceutical delivery vehicle, in the ~~for~~ preparation of an intracorporeal radiosensitizer medicament for high energy phototherapeutic treatment of cancerous, pre-cancerous, and infectious diseases of human and animal tissue using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene is added to said pharmaceutical delivery vehicle to form said medicament,

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein,

~~provided that~~ wherein said halogenated xanthene does not contain a radioisotope, and

wherein said medicament does not contain liposomes.

17 (Previously presented). The use of claim 16 wherein said medicament is for the treatment of diseases of the skin diseases of the mouth and digestive tract, diseases of the urinary and reproductive tracts, diseases of the respiratory tract, diseases of the circulatory system, diseases of the head and neck, diseases of the endocrine and lymphoreticular systems, diseases of connective tissues, and diseases of tissue surfaces exposed during surgery.

18 (Currently amended). Use of a halogenated xanthene, as the active component in a pharmaceutical delivery vehicle, in the preparation of an intracorporeal radiosensitizer medicament for high energy phototherapeutic treatment of cancerous, pre-cancerous, and infectious diseases of human and animal tissue using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene is added to said pharmaceutical delivery vehicle to form said medicament,

wherein said halogenated xanthene consists of disodium Diiodofluorescein, disodium Eosin B, disodium Eosin Y, disodium Erythrosin B, disodium Phloxine B, or disodium ~~The use of claim 16 wherein said halogenated xanthene is~~ Rose Bengal,

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said medicament does not contain liposomes.

19 (Canceled)

20 (Previously presented). The use of claim 16 wherein said applied ionizing radiation is x-ray irradiation.

21 (Previously presented). The use of claim 16 wherein said applied ionizing radiation is gamma irradiation.

22 (Currently amended). Intracorporeal use of a radiosensitizer medicament consisting ~~of a sodium or potassium salt~~ of a halogenated xanthene formulated in a pharmaceutical delivery vehicle for high energy phototherapeutic treatment comprising:

administering said radiosensitizer medicament into or proximate to human or animal tissue and irradiating said tissue with applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein,

~~provided that~~ wherein said halogenated xanthene does not contain a radioisotope, and wherein said medicament does not contain liposomes.

23 (Currently amended). Intracorporeal use of a radiosensitizer medicament consisting of a halogenated xanthene formulated in a pharmaceutical delivery vehicle for high energy phototherapeutic treatment comprising:

administering said radiosensitizer medicament into or proximate to human or animal tissue and irradiating said tissue with applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of disodium Diiodofluorescein, disodium Eosin B, disodium Eosin Y, disodium Erythrosin B, disodium Phloxine B, or disodium ~~The use of claim 22 wherein said halogenated xanthene is~~ Rose Bengal,

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said medicament does not contain liposomes.

24 (Canceled)

25. (Previously presented) The use of claim 22 wherein said applied ionizing radiation is x-ray irradiation.

26. (Previously presented) The use of claim 22 wherein said applied ionizing radiation is gamma irradiation.

27. (Previously presented) The use of claim 22 wherein said radiosensitizer medicament contains said halogenated xanthene at a concentration of greater than approximately 0.001% to less than approximately 20%.

28. (Previously presented) The use of claim 22 wherein said administering comprises a route of administration selected from the group consisting of intravenous injection, intraperitoneal injection, intramuscular injection, intracranial injection, intratumoral injection, intraepithelial injection, transcutaneous delivery, per oesophageal administration, intraabdominal administration, intraapendicular administration, intraarterial administration, intraaricular administration, intrabronchial administration, intrabuccal administration, intracapsular administration, intracardial administration, intracartilaginous administration, intracavitary administration, intracephalic administration, intracolic administration, intracutaneous administration, intracystic administration, intradermal administration, intraductal administration, intraduodenal administration, intrafascicular administration, intrafat administration, intrafilar administration, intrafissural administration, intragastric administration, intraglandular administration, intrahepatic administration, intraintestinal administration, intralamellar administration, intralesional administration, intraligamentous administration, intralingual administration, intramammary administration, intramedullary administration, intrameningeal administration, intramyocardial administration, intranasal administration, intraocular administration, intraoperative administration, intraoral administration, intraosseous administration, intraovarian administration, intrapancreatic administration, intraparietal administration, intrapelvic administration, intrapericardial administration, intraperineal administration, intraperitoneal administration, intraplacental administration, intrapleural

administration, intrapontine administration, intraprostatic administration, intrapulmonary administration, intrarachidian administration, intrarectal administration, intrarenal administration, intrascleral administration, intrascrotal administration, intrasegmental administration, intrasellar administration, intraspinal administration, intrasplenic administration, intrasternal administration, intrastromal administration, intrasynovial administration, intratarsal administration, intratesticular administration, intrathoracic administration, intratonsillar administration, intratracheal administration, intratubal administration, intratympanic administration, intraureteral administration, intraurethral administration, intrauterine administration, intravaginal administration, intravascular administration, intraventricular administration, intravertebral administration, intravesical administration, and intravitreous administration.

29 (Currently amended). A radiosensitizer pharmaceutical composition for intracorporeal administration, consisting ~~of a sodium or potassium salt~~ of a halogenated xanthene as the active component in a pharmaceutical delivery vehicle, for high energy phototherapeutic treatment using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein,

~~provided that~~ wherein said halogenated xanthene does not contain a radioisotope, and wherein said composition does not contain liposomes.

30. (Previously presented) The pharmaceutical composition of claim 29 wherein said halogenated xanthene is present in a concentration of greater than about 0.001% to less than about 20%.

31 (Currently amended). A radiosensitizer pharmaceutical composition for intracorporeal administration, consisting of a halogenated xanthene as the active component in a pharmaceutical delivery vehicle, for high energy phototherapeutic treatment using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of disodium Diiodofluorescein, disodium Eosin B, disodium Eosin Y, disodium Erythrosin B, disodium Phloxine B, or disodium ~~The pharmaceutical composition of claim 29 wherein said halogenated xanthene is~~ Rose Bengal,

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said composition does not contain liposomes.

32-35 (Canceled)

36. (Previously presented) The pharmaceutical composition of claim 29 wherein said pharmaceutical composition is formulated in a delivery vehicle selected from the group consisting of liquids, semisolids, solids and aerosols.

37. (Previously presented) The pharmaceutical composition of claim 36 wherein said vehicle is selected from the group consisting of aqueous suspensions, non-aqueous suspensions, solutions, creams, ointments, gels, syrups, suppositories, tablets, capsules and micro-droplet sprays.

38. (Previously presented) The pharmaceutical composition of claim 29 wherein said halogenated xanthene is in a delivery vehicle that includes an adjuvant selected from the group consisting of builders, stabilizers, emulsifiers, dispersants, preservatives, buffers, electrolytes, tissue penetrating agents and tissue softening agents.

39. (Previously presented) The pharmaceutical composition of claim 29 wherein said applied ionizing radiation is x-ray irradiation.

40. (Previously presented) The pharmaceutical composition of claim 29 wherein said applied ionizing radiation is gamma irradiation.

41-45 (Canceled)

46 (Currently amended). An intracorporeally-applicable radiosensitizer medicament consisting ~~of a sodium or potassium salt~~ of a halogenated xanthene as the radiodense active component in a pharmaceutical delivery vehicle, wherein said medicament is for high energy phototherapeutic treatment, using applied ionizing radiation having an energy of greater than approximately 1 keV, of human and animal tissue, ~~and~~

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein,

~~provided that~~ wherein said halogenated xanthene does not contain a radioisotope, and wherein said medicament does not contain liposomes.

47 (Currently amended). A radiosensitizer pharmaceutical composition for intracorporeal administration consisting of a dosage unit ~~of a sodium or potassium salt~~ of a halogenated xanthene in a pharmaceutical delivery vehicle suitable for radiosensitization using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of 4,5,6,7-Tetrabromoerythrosin, Monobromoerythrosin, Dibromoerythrosin, Tribromoerythrosin, Monochloroerythrosin, Dichloroerythrosin, Trichloroerythrosin, Monofluoroerythrosin, Difluoroerythrosin, Trifluoroerythrosin, 2',7'-Dichloro-4,5,6,7-Tetrafluorofluorescein, 2',4,5,6,7,7'-Hexafluorofluorescein, or 4,5,6,7-Tetrafluorofluorescein,

~~provided that~~ wherein said halogenated xanthene does not contain a radioisotope, and wherein said composition does not contain liposomes.

48. (Previously presented) The pharmaceutical composition of claim 47 wherein said applied ionizing radiation is x-ray irradiation.

49. (Previously presented) The pharmaceutical composition of claim 47 wherein said applied ionizing radiation is gamma irradiation.

50. (Currently amended) A radiosensitizer pharmaceutical composition for intracorporeal administration consisting of a dosage unit of a halogenated xanthene in a pharmaceutical delivery vehicle suitable for radiosensitization using applied ionizing radiation having an energy of greater than approximately 1 keV,

wherein said halogenated xanthene consists of disodium Diiodofluorescein, disodium Eosin B, disodium Eosin Y, disodium Erythrosin B, disodium Phloxine B, or disodium ~~The pharmaceutical composition of claim 47 wherein said halogenated xanthene is~~ Rose Bengal,

wherein said halogenated xanthene does not contain a radioisotope, and

wherein said composition does not contain liposomes.